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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |
|---|-------------|----------------------|----------------------|------------------|
| 09/838,730  | 04/19/2001  | Tawfik R. Arabi      | 884.410US1           | 9492             |
| 21186   | 7590        | 11/05/2003           | EXAMINER             |                  |
| SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.<br>P.O. BOX 2938<br>MINNEAPOLIS, MN 55402 |             |                      | ROBERT, RUSSELL MARC |                  |
|   |             |                      | ART UNIT             | PAPER NUMBER     |
|   |             |                      | 2829                 |                  |

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/838,730

Applicant(s)

ARABI ET AL.

Examiner

Russell M Kobert

Art Unit

2829

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 31-51 is/are pending in the application.
- 4a) Of the above claim(s) 31-42 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-9 and 48-51 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 43-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

1. Applicant's arguments filed June 2, 2003 have been fully considered but they are not persuasive. Applicants argue that claims 1 and 43 as amended now include elements similar to those elements in allowable claim 6 and as such Applicants further argue that the rejection under 35 USC 102(b) by Consiglio (5519327) of claims 1 and 43 be withdrawn. This is not found to be convincing because Applicants have not included each and every limitation of allowable claim 6 within claims 1 and 43. Moreover, the added limitation of "sampling a state of the terminal after the predetermined time" in each of claims 1 and 43 is not considered to exceed the meets and bounds of Consiglio. In the Consiglio Patent (column 7, line 60-62), a Sense Measuring Unit (SMU) such as the Hewlett Packard HP4145 and also disclosed in Consiglio, in operation must sample a signal on the terminal prior to determining a state of the terminal in order to perform the determining step.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5 and 43-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Consiglio (5519327).

Consiglio anticipates a method of testing an integrated circuit (IC), the method comprising: driving a terminal on the IC to a state (col 6, ln 64 – col 7, ln 3); stopping the driving of the terminal (col 6, ln 4-9); floating the terminal for a predetermined time ( $T_2$ ); sampling a state of the terminal after the predetermined time (via the use of an SMU); and determining a state of the terminal after the predetermined time (col 7, ln 59 – col 8, ln 4); as recited in claim 1.

As to claim 2, determining quality of the IC based on the state of the terminal after the predetermined time (considered inherent to Consiglio; see Abstract). Moreover the limitations of claims 3-5 are considered the inherent method of use of Consiglio.

Consiglio anticipates a machine-readable medium having instructions stored thereon to cause a tester to perform a method, the method comprising: driving a terminal on the IC to a state (col 6, ln 64 – col 7, ln 3); stopping the driving of the terminal (col 6, ln 4-9); floating the terminal for a predetermined time ( $T_2$ ); sampling a state of the terminal after the predetermined time (via the use of an SMU); and determining a state of the terminal after the predetermined time (col 7, ln 59 – col 8, ln 4); as recited in claim 43.

As to claims 44-47, the limitations are considered the inherent method of use of Consiglio.

4. The following is a statement of reasons for the indication of allowable subject matter:


Claims 6-9, as previously indicated to be allowable in the prior Office Action, remain allowable. The reason is restated for Applicants' convenience:

A method of testing comprising: charging a pin on an integrated circuit (IC) until it reaches a known state; stopping the charging of the pin; floating the pin for a predetermined time; sampling a state of the pin after the predetermined time; and determining a test result of the pin based on the state of the pin after the predetermined time, wherein the method is performed with Boundary Scan as recited in claim 6 has not been found.

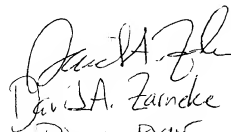
Claims 48-51 are allowable because they include each and every one of the method steps of allowable claim 6.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell Kobert whose telephone number is (703) 308-5222.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Russell M. Kobert  
Patent Examiner  
Group Art Unit 2829  
October 30, 2003



David A. Zardecki  
Primary Examiner  
Art 2829  
11/2/03